

upper and lower, generally "u" shaped bite trays each including troughs along both sides and the front portions and adapted to fit over the upper and lower teeth of the patient,

the upper tray having fastening means near its front portion,

a supply of material which, when applied to the troughs of each tray, is adapted to adhere thereto, and, when the trays are fitted over the teeth, form an impression which adheres to the teeth to the extent necessary to be temporarily retained in the patient's mouth, and

connecting means having

an inner end connected to the lower tray rearwardly of the fastening means when the trays are in place and

of such length that its outer end extends

forwardly of the patient's lips, and means intermediate its inner and outer ends which is releasably fastenable to the fastening means of the upper tray,

said connecting means being sufficiently elastic that its outer end may be manipulated to permit it to be fastened to the upper tray in different forward and rearward positions, or, with the connecting means releasably fastened to the lower tray prior to installation of the trays, the lower tray will, when installed, force the lower tray and thus the lower jaw to a desired forward position with respect to the upper tray, but nevertheless being sufficiently non-elastic as to prevent substantial movement of the lower tray

from the position in which it is releasably fastened,
said trays and said impressions, upon hardening, being sufficiently elastic that they may be removed from the teeth.

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~~27.~~ As in claim ~~26~~¹, wherein the inner end of the connecting means is releasably connected to the lower tray.

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~~28.~~ As in claim ~~26~~¹ or ~~27~~², wherein each side of one tray has a bite plane engageable with the bite surfaces on the other tray.

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~~29.~~ As in claim ~~28~~³, wherein the bite planes are on the lower tray.

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~~30.~~ As in claim ~~29~~⁴, wherein each bite plane is formed on the means releasably attaching the inner end of the connecting means to the lower tray.

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~~31.~~ As in claim ~~26~~¹, wherein the inner end of the connecting means has wings each connected to an opposite side of the tray.

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~~32.~~ As in claim ~~31~~⁶, wherein each wing is releasably connected to a side of the tray by a hole in one tightly fittable over a button on the other.

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~~33.~~ As in claim ~~26~~¹ or ~~27~~², wherein

the means for releasably fastening the inner end of the connecting means to the front position of each tray comprises a pin on one and a series of spaced holes on the other fittably closely over the pin.

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34. As in claim ~~33~~⁸, wherein the pin is on the front portion of the upper tray, and the holes are formed in the outer end of the connecting means.

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35. As in claim ~~26~~¹, wherein each tray is of such construction that its sides may flex inwardly and outwardly to accommodate different sized jaws.

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36. As in claim ~~35~~¹⁰, wherein the supply of impression material is prepackaged for storage and supply along with the trays and connecting means, and includes components which, when combined, are adapted to be formed into a moldable shape for application to the troughs.

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37. As in claim ~~26~~¹, including means on the trays for enhancing the adherence of the impressions material to the troughs.

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38. As in claim ~~26~~¹, wherein the impression material is of such consistency as to flow and harden in the undercut areas of the teeth.

14-39.

A method of advancing a patient's lower jaw, with the use of an oral appliance which includes upper and lower, generally "u" shaped bite trays each including troughs along both sides and the front portion thereof and adapted to fit over the upper and lower teeth of the patient, the upper tray having fastening means near its forward portion, a supply of impression material, and connecting means having an inner end connected to the lower tray rearwardly of the fastening means when the trays are in place, and means intermediate its inner and outer ends which is releasably fastenable to the fastening means of the upper tray, so that its outer end extends beyond the front portion of the lower tray, the steps of applying the impression material to the troughs of each tray so as to cause it to adhere thereto, fitting the troughs of the upper and lower trays to the upper and lower teeth including their undercut portions to form an impression of the teeth, manipulating the outer end of the connecting means so as to locate the fastening means thereon in a position to releasably engage the fastening means on the upper tray, fastening the connecting means to the upper tray when so located, and pulling the outer end of the connecting means to unfasten it from the upper tray and thereafter manipulating the upper end of the connecting means to refasten it, and

refastening the connecting means to the upper tray in another position, or, if desired, enabling the appliance to be removed by lifting the trays from the teeth.

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A method of advancing a patient's lower jaw, with the use of an oral appliance which includes upper and lower, generally "u" shaped bite trays each including troughs along both sides and the front portion thereof and adapted to fit over the upper and lower teeth of the patient, the upper tray having fastening means near its forward portion, supply of impression material, and connecting means having an inner end connected to the lower tray rearwardly of the fastening means when the trays are in place, and means intermediate its inner and outer ends which is releasably fastenable to the fastening means on the upper tray, so that its outer end will extend beyond the front portion of the lower tray, the steps of applying the impression material to the troughs of each tray so as to cause it to adhere thereto, fitting the troughs of the upper and lower trays to the upper and lower teeth to form an impression of the teeth, removing the trays from the patient's teeth, manipulating the outer end of the connecting means so as to locate the fastening means thereon in a position to releasably engage the fastening means on the upper tray, fastening the connecting means to the upper tray when so located, and

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by fitting the upper and lower trays and impressions over the upper and lower teeth so as to advance the lower teeth with the lower tray a distance corresponding to the advance of the lower tray, and

thereafter manipulating the outer end of the connecting means to release its fastening means from that of the upper tray so that the connecting means may be refastened to the upper tray in another position, or, if desired, permit the appliance to be removed by lifting the trays from the teeth.

REMARKS

Original claims 1-25 of this application have been replaced by new claims 26 to 40, which are believed to more clearly define over the prior art upon which the Examiner relies. The Examiner is therefore respectfully requested to favorably consider these new claims particularly in the light of the remarks to follow regarding the prior art which he applied to the cancelled claims.

In the appliance of Halstrom '945 patent, the lower bite block 32 may be moved inwardly and outwardly with respect to the upper bite block 28, when both bite blocks are in place, only by their removal from the patient's mouth. Thus, this prior device is uniquely unqualified for use during surgical procedures, when it may be necessary to advance or permit the lower jaw to retract, or even remove or reinstall the appliance, and is not even remotely suggestive of Applicant's claimed upper and lower trays, with a connector having connecting means such as a pull